Facilitated Access to Access- Protected Hotzones

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March 2007

Abstract

The research presented in the poster draws attention to an emerging incompatibility of current web based splash-page access networks with emerging client devices (such as VoIP phones, Telemetry units, X-boxes and sensor network gateways) and the difficulty of roaming across different physical networks belonging to the same administrative domain (for example Fred-eZone and a 3G/WLAN mobile hotspot). A solution is outlined to allow non-web browser enabled client devices to connect and retain some security measures such as logging MAC addresses.

A variety of emerging devices open connections at various ports (e.g port 20 for ftp, 25 for smtp, port 97 for Swift Remote Virtual File Protocol, 5060 for Session Initiation Protocol) other than at port 80 (for web browser). Normally port 80 is used to display the acceptable use policy (AUP), and after submitting the agreement to the AUP the user is registered and connected. This implies that a user accessing any port other than port 80 cannot connect to the network.

Investigations were conducted to see if connection management can be consolidated to one (or two) ports if SIP is used. The objective is to establish a general purpose SIP environment and operational process for lightweight use including mechanisms to connect through firewalls without user intervention.

The poster presents the research results obtained so far.